

Exhibit 6

IN THE
UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
EASTERN DIVISION

RODNEY D. PIERCE; *et al.*,

Plaintiffs,

v.

THE NORTH CAROLINA STATE
BOARD OF ELECTIONS; *et al.*,

Defendants,

Case No. 4:23-cv-193-D

EXPERT REPORT OF SEAN P. TRENDE, Ph.D.

1 Expert Qualifications

1.1 Career

I serve as Senior Elections Analyst for Real Clear Politics. I joined Real Clear Politics in January of 2009 after practicing law for eight years. I assumed a fulltime position with Real Clear Politics in March of 2010. Real Clear Politics is a company of approximately 50 employees, with its main offices in Washington D.C. It produces one of the most heavily trafficked political websites in the world, which serves as a one-stop shop for political analysis from all sides of the political spectrum and is recognized as a pioneer in the field of poll aggregation. Real Clear Politics produces original content, including both data analysis and traditional reporting.

My main responsibilities with Real Clear Politics consist of tracking, analyzing, and writing about elections. I collaborate in rating the competitiveness of Presidential, Senate, House, and gubernatorial races. As a part of carrying out these responsibilities, I have studied and written extensively about demographic trends in the country, exit poll data at the state and federal level, public opinion polling, and voter turnout and voting behavior. In particular, understanding the way that districts are drawn and how geography and demographics interact is crucial to predicting United States House of Representatives races, so much of my time is dedicated to that task.

I am currently a Visiting Scholar at the American Enterprise Institute, where my publications focus on the demographic and coalitional aspects of American Politics.

I am also a Lecturer at The Ohio State University.

1.2 Publications and Speaking Engagements

I am the author of the 2012 book *The Lost Majority: Why the Future of Government is up For Grabs and Who Will Take It*. In this book, I explore realignment theory. It argues that realignments are a poor concept that should be abandoned. As part of this analysis, I conducted a thorough analysis of demographic and political trends beginning

in the 1920s and continuing through modern times, noting the fluidity and fragility of the coalitions built by the major political parties and their candidates.

I also co-authored the 2014 Almanac of American Politics. The Almanac is considered the foundational text for understanding congressional districts and the representatives of those districts, as well as the dynamics in play behind the elections. My focus was researching the history of and writing descriptions for many of the 2012 districts, including tracing the history of how and why they were drawn the way that they were drawn. Because the 2014 Almanac covers the 2012 elections, analyzing how redistricting was done was crucial to my work. I have also authored a chapter in Larry Sabato's post-election compendium after every election dating back to 2012.

I have spoken on these subjects before audiences from across the political spectrum, including at the Heritage Foundation, the American Enterprise Institute, the CATO Institute, the Bipartisan Policy Center, and the Brookings Institution. In 2012, I was invited to Brussels to speak about American elections to the European External Action Service, which is the European Union's diplomatic corps. I was selected by the United States Embassy in Sweden to discuss the 2016 elections to a series of audiences there and was selected by the United States Embassy in Spain to fulfill a similar mission in 2018. I was invited to present by the United States Embassy in Italy, but was unable to do so because of my teaching schedule.

1.3 Education

I received my Ph.D. in political science at The Ohio State University in 2023. I passed comprehensive examinations in both methods and American Politics. The first chapter of my dissertation involves voting patterns on the Supreme Court from 1900 to 1945; the second chapter involves the application of integrated nested Laplace approximations to enable the incorporation of spatial statistical analysis in the study of United States elections. The third chapter of the dissertation involves the use of communities of interest in redistricting simulations. In pursuit of this degree, I also earned a Mas-

ter's Degree in Applied Statistics. My coursework for my Ph.D. and M.A.S. included, among other things, classes on G.I.S. systems, spatial statistics, issues in contemporary redistricting, machine learning, non-parametric hypothesis tests and probability theory. I also earned a B.A. from Yale University in history and political science in 1995, a Juris Doctor from Duke University in 2001, and a Master's Degree in political science from Duke University in 2001.

In the winter of 2018, I taught American Politics and the Mass Media at Ohio Wesleyan University. I taught Introduction to American Politics at The Ohio State University for three semesters from Fall of 2018 to Fall of 2019, and again in Fall of 2021. In the Springs of 2020, 2021, 2022 and 2023, I taught Political Participation and Voting Behavior at The Ohio State University. This course spent several weeks covering all facets of redistricting: how maps are drawn, debates over what constitutes a fair map, measures of redistricting quality, and similar topics. I also taught survey methodology in Fall of 2022 and Spring of 2024.

1.4 Prior Engagements as an Expert

A full copy of all cases in which I have testified or been deposed is included on my c.v, attached as Exhibit 1. In 2021, I served as one of two special masters appointed by the Supreme Court of Virginia to redraw the districts that will elect the Commonwealth's representatives to the House of Delegates, state Senate, and U.S. Congress in the following decade. The Supreme Court of Virginia accepted those maps, which were praised by observers from across the political spectrum. *E.g.*, "New Voting Maps, and a New Day, for Virginia," *The Washington Post* (Jan. 2, 2022), available at <https://www.washingtonpost.com/opinions/2022/01/02/virginia-redistricting-voting-maps-gerrymander/>; Henry Olsen, "Maryland Shows How to do Redistricting Wrong. Virginia Shows How to Do it Right," *The Washington Post* (Dec. 9, 2021), available at <https://www.washingtonpost.com/opinions/2021/12/09/maryland-virginia-redistricting/>; Richard Pildes, "Has VA Created a New Model for a Reasonably Non-Partisan Redistricting

Process,” *Election Law Blog* (Dec. 9, 2021), available at <https://electionlawblog.org/?p=126216>.

In 2019, I was appointed as the court’s expert by the Supreme Court of Belize. In that case I was asked to identify international standards of democracy as they relate to malapportionment claims, to determine whether Belize’s electoral divisions (similar to our congressional districts) conformed with those standards, and to draw alternative maps that would remedy any existing malapportionment.

I served as a Voting Rights Act expert to counsel for the Arizona Independent Redistricting Commission in 2021 and 2022.

2 Scope of Engagement

I have been retained by the law firm of Nelson Mullins Riley & Scarborough, LLP, on behalf of the legislative defendants in the above-captioned action. I was asked to examine the districts drawn by Mr. Blakeman B. Esselstyn in his Nov. 22, 2023 map. To accomplish this, I used the block assignment files and shapefiles provided by plaintiffs for their Demonstration Districts, and code that I authored using the computer programming language R.

3 Analysis of the Demonstration Map

3.1 Demonstration Map A

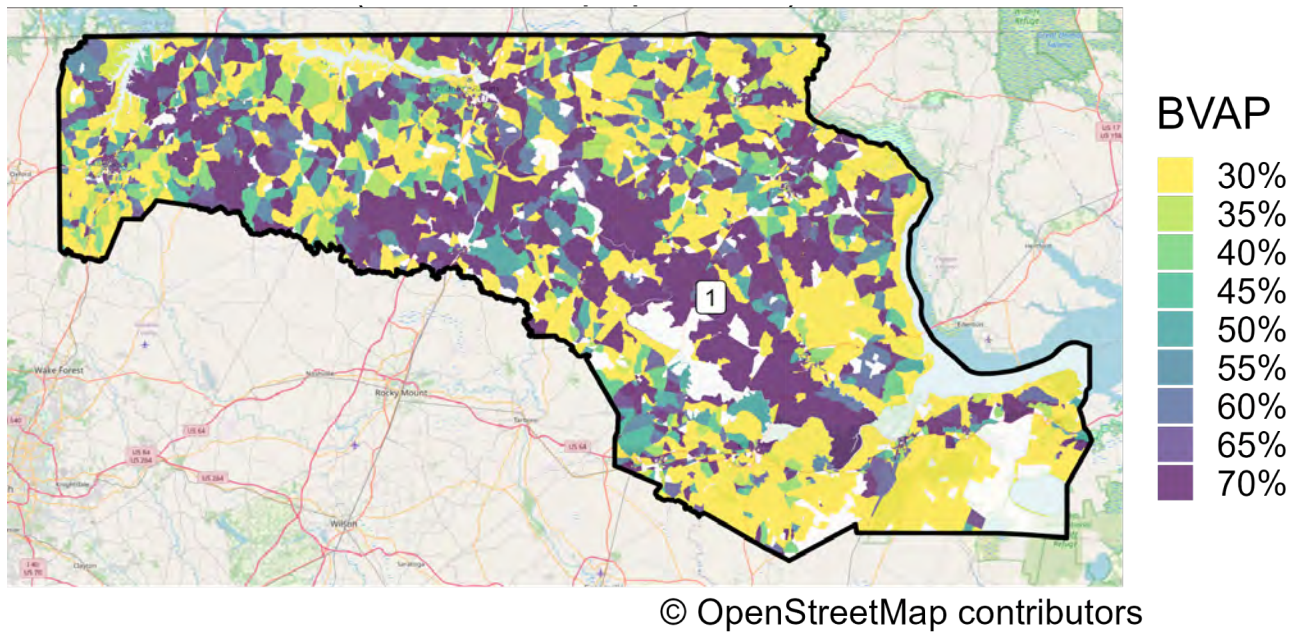
Demonstration Map A consists only of a single illustrative district. It consists of Bertie, Halifax, Hertford, Martin, Northampton, Vance, Warren and Washington counties. I have referred to a document located at <https://sites.duke.edu/quantifyinggerrymandering/files/2021/08/countyClusters2020.pdf>, which displays the “Stephenson groupings” for the state of North Carolina. Vance County is not within the same Stephenson grouping as are the remaining counties. I have not had sufficient time

to work out what the impact of removing Vance County from the Stephenson group that currently contains Franklin and Nash counties would be. However, Franklin and Nash counties do not have sufficient population to support a single Senate district on their own. Therefore, they will have to be combined with an additional county or with additional counties. In other words, there will be a cascade of changes that are difficult to sort out at this point.

The district contains 160,510 residents of voting age, of whom 82,610 are Black. Thus, the percent Black Voting Age Population (BVAP) of the district is 51.47%. With a population of 160,510, residents of Voting Age, the district would need to have 80,256 Black residents of voting age to be 50% + 1 Black. Because every county in the district has at least 2,364 Black residents of voting age, all counties in the map are required to achieve a majority Black district. If counties were to be split, which I understand to violate the Stephenson rule, only three precincts at the eastern end of Washington County could be removed while maintaining a BVAP of 50%, or two precincts at the western tip of Vance County could be removed.

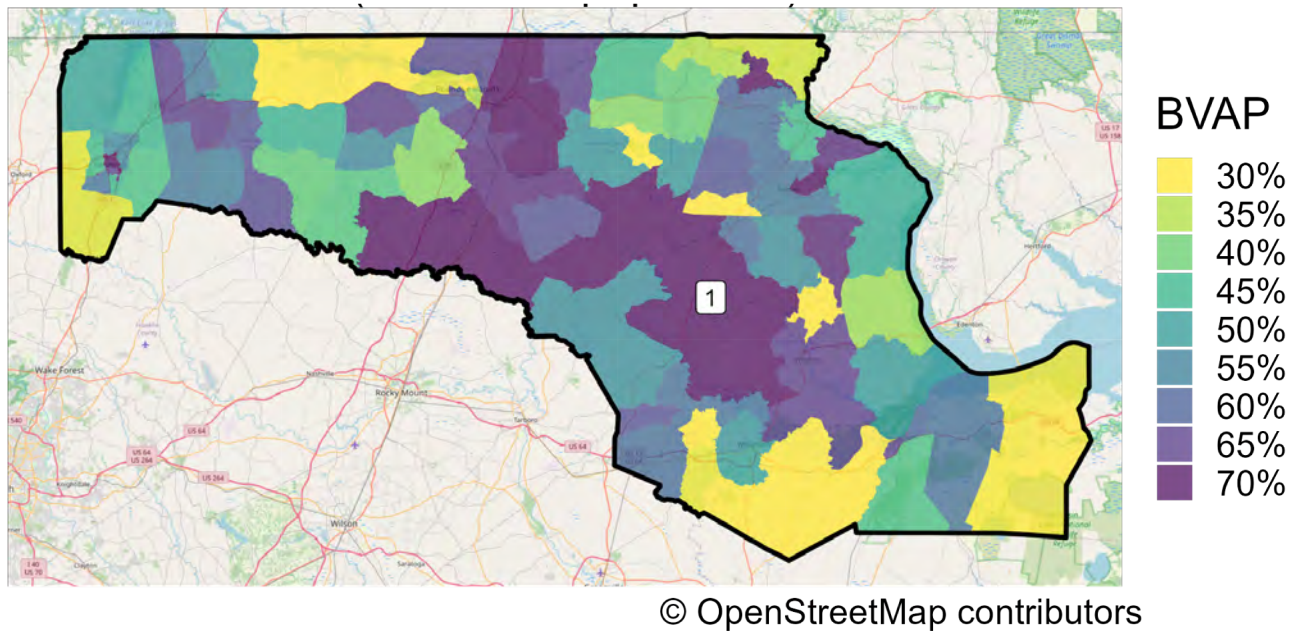
I was first asked to create maps that would depict the racial distribution of residents of voting age in Plaintiffs' proposed districts. We begin with choropleth maps. Choropleth maps are traditional "area-based" maps, where some areal unit (here, blocks or VTDs) are shaded to correspond with some data (here, percentage of residents who are Black and of voting age ("BVAP")). We can first look at the maps at the census block level.

Figure 1: Proposed VRA District in Demonstration Map A, Block Level



We can also examine the district at the VTD level:

Figure 2: Proposed VRA District in Demonstration Map A, Block Level



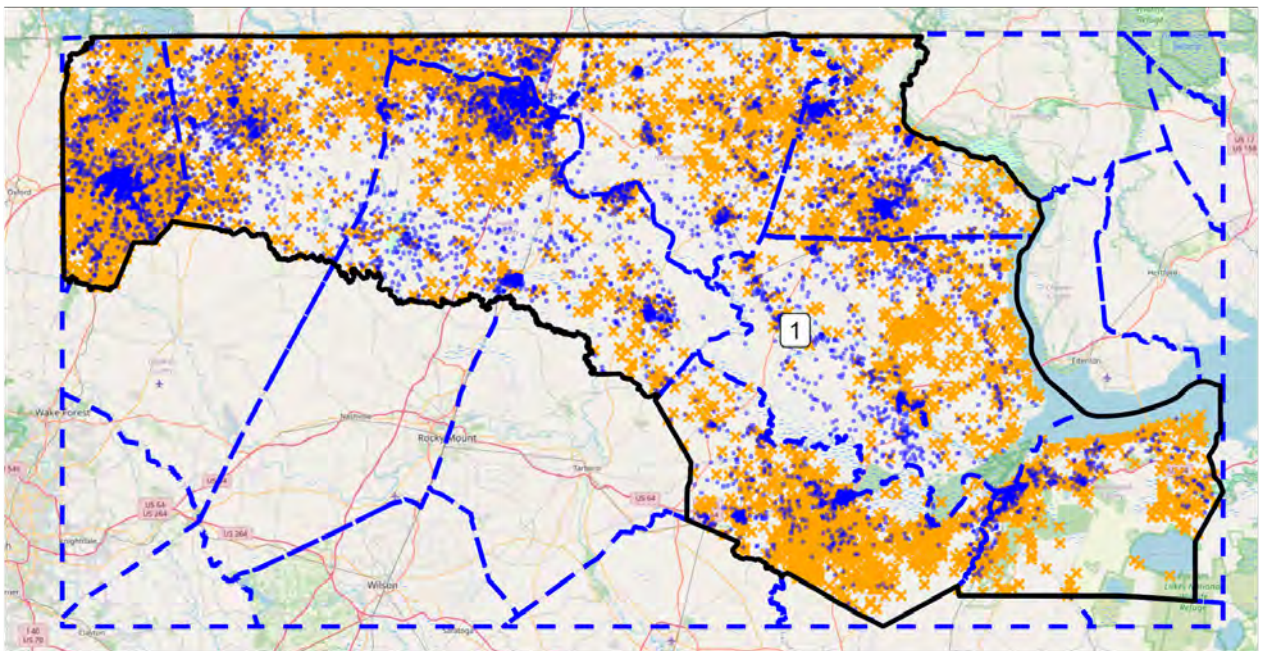
These color scales on these maps are truncated at 30% and 70% BVAP. In my experience, allowing the color scale to run from 0% to 100% risks losing a good deal of data, as differences in the crucial 40% - 60% BVAP range are blended together. This approach has been accepted in many courts in which I have testified, and has never been challenged by a court.

One of the limitations of choropleth maps, however, is that they don't reveal populations. A VTD with 10 Black residents and 10 White residents is treated the same as a VTD with 1,000 Black residents and 1,000 White residents. While there may be times where those differences are immaterial, there may also be times where the difference is important.

To account for this, I will typically employ dot density maps. Dot density maps have been utilized in cases at least back to the Bethune-Hill case, where Dr. Rodden employed them to examine the distribution of residents of districts. In a dot density map, census blocks are taken as the basis for the district. In each block, a dot is drawn

for every member of a group, or every ten members, or every 100 members, depending on the scale of the map. For these maps, I employ 1 blue dot for 10 Black Citizens of Voting Age, an orange “x” for 10 White Citizens of Voting Age, and a purple “+” for 10 members of other races. Obviously there is some rounding involved, but in the aggregate that typically does not matter. The dashed blue lines reflect county boundaries.

Figure 3: Proposed VRA District in Demonstration Map A, Dot Density Map. 1 blue dot = 10 Black residents of voting age, while 1 orange x = 10 White residents of voting age.



3.2 Demonstration Map B

I was also asked to consider the racial distribution of the residents of Map B. District B-1 is the purported VRA demonstration district. Its Voting Age Population is 160,306. Of those, 77,599 residents are Black, giving the district a percent BVAP of 48.4%. Over 11,000 of those Black residents live at the top of the arm of the district that extends into (and splits) Pasquotank County to take in Elizabeth City.

For this, I created two “looks.” The first depicts both District B-1, which is the Illustrative District, and District B-2, which is the other district that fills out the Stevenson grouping. The second depicts District B-1 alone.

Figure 4: Proposed VRA District in Demonstration Map B, Block Level

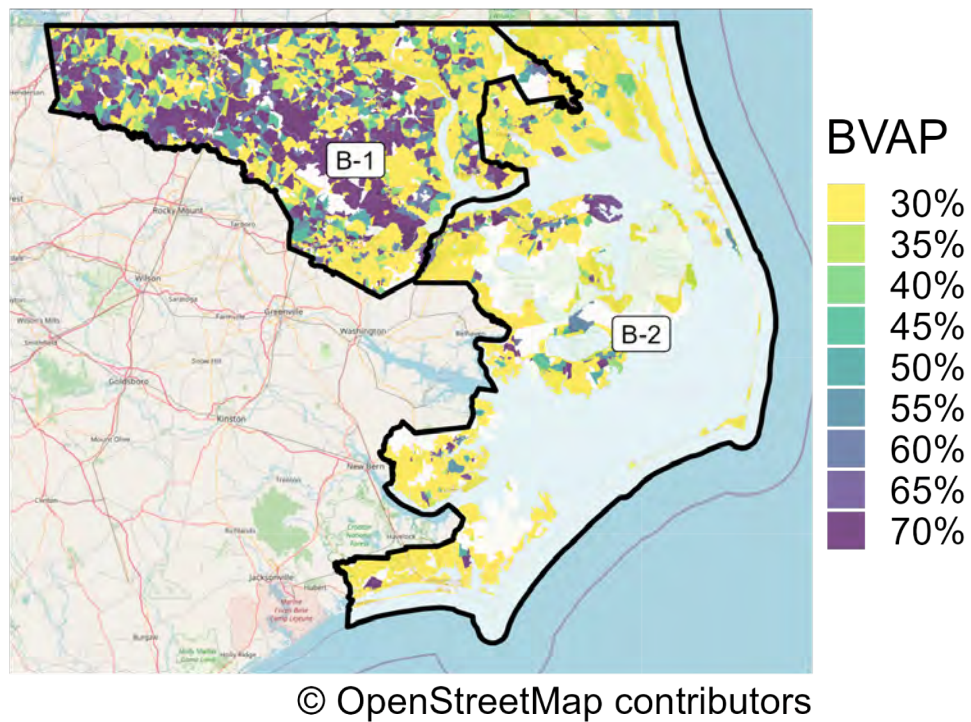
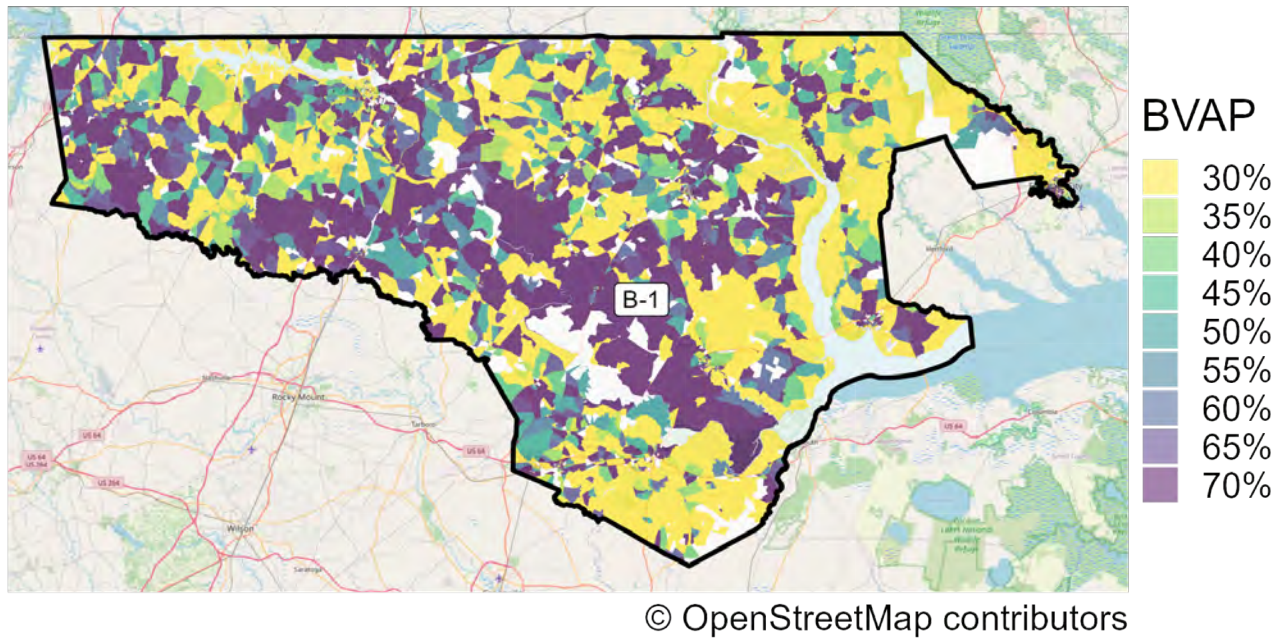


Figure 5: Proposed VRA District in Demonstration Map B, Block Level



We can also view the data at a VTD level:

Figure 6: Proposed VRA District in Demonstration Map B, VTD Level

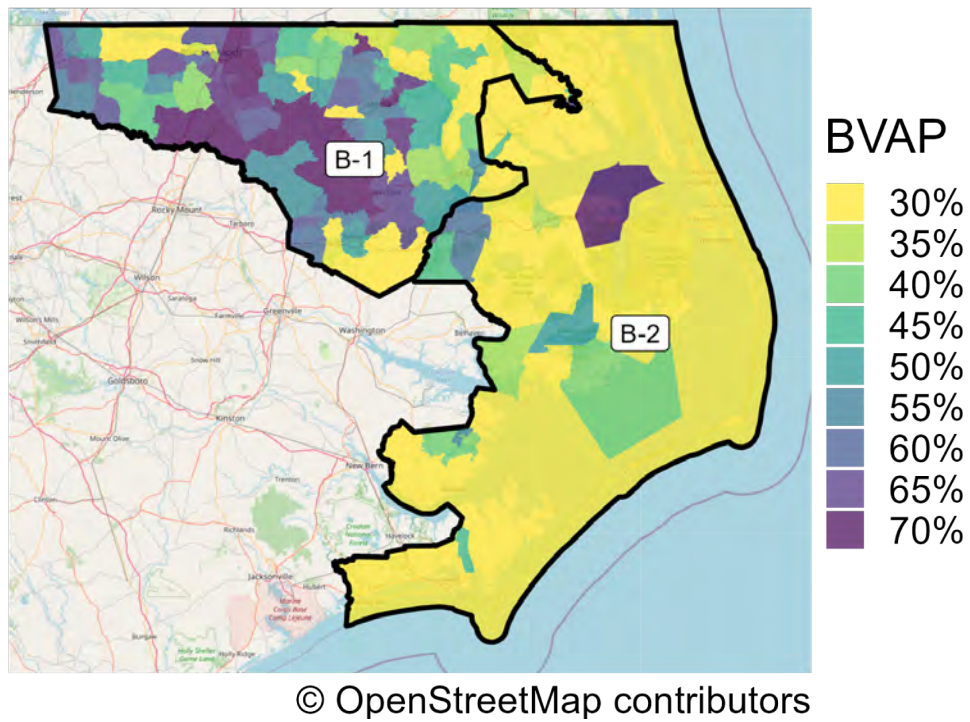
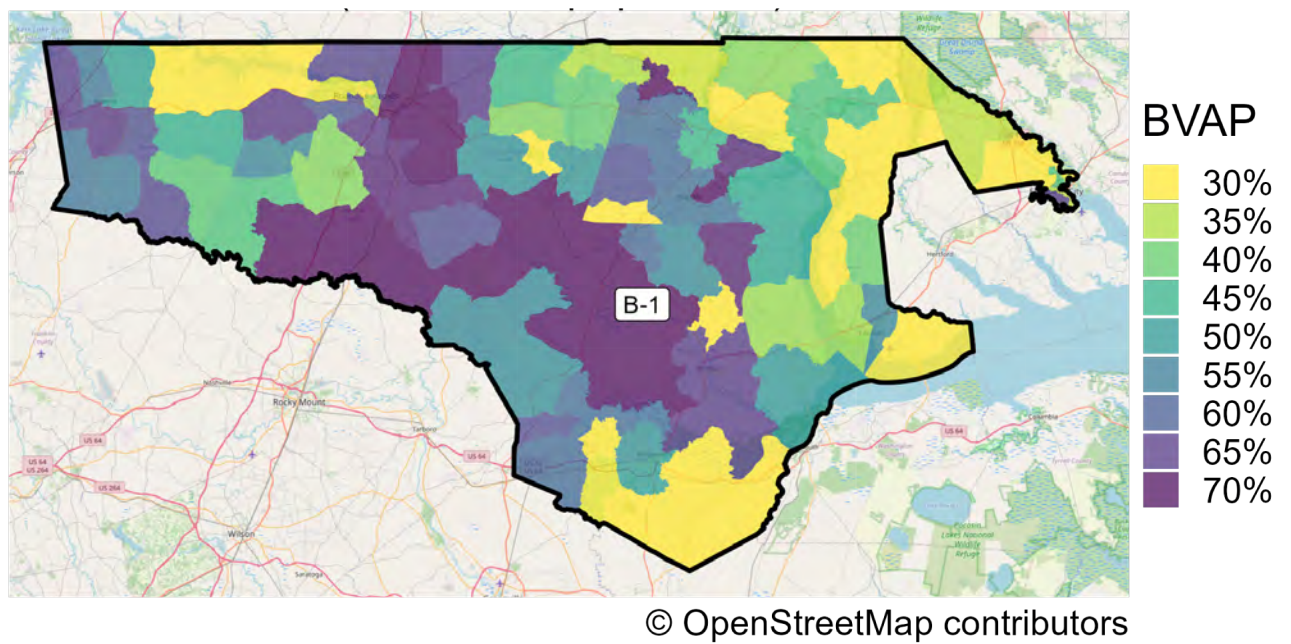


Figure 7: Proposed VRA District in Demonstration Map B, VTD Level



Finally, we can better see the distribution of residents using dot density maps:

Figure 8: Proposed VRA District in Demonstration Map B, Dot Density Map

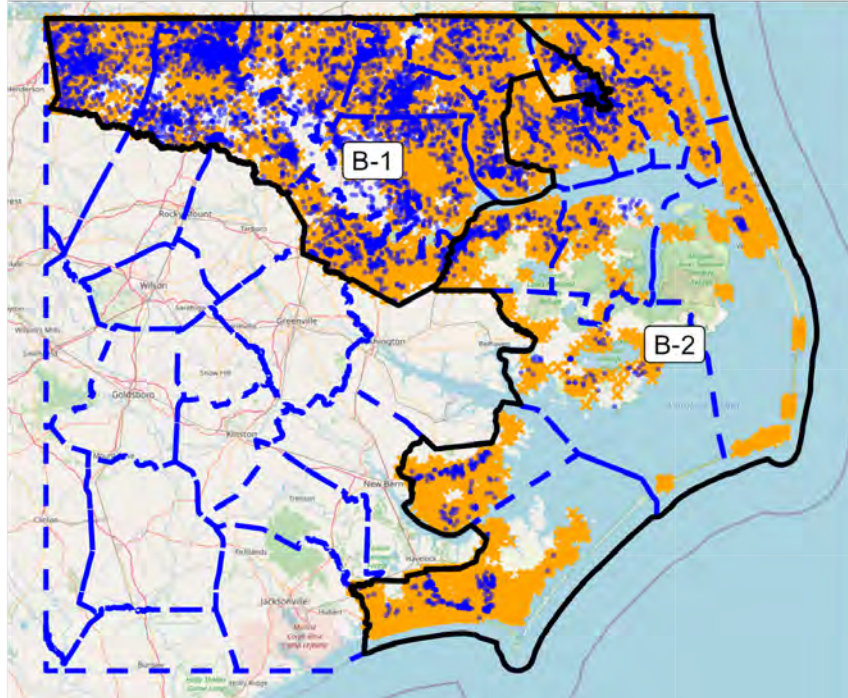
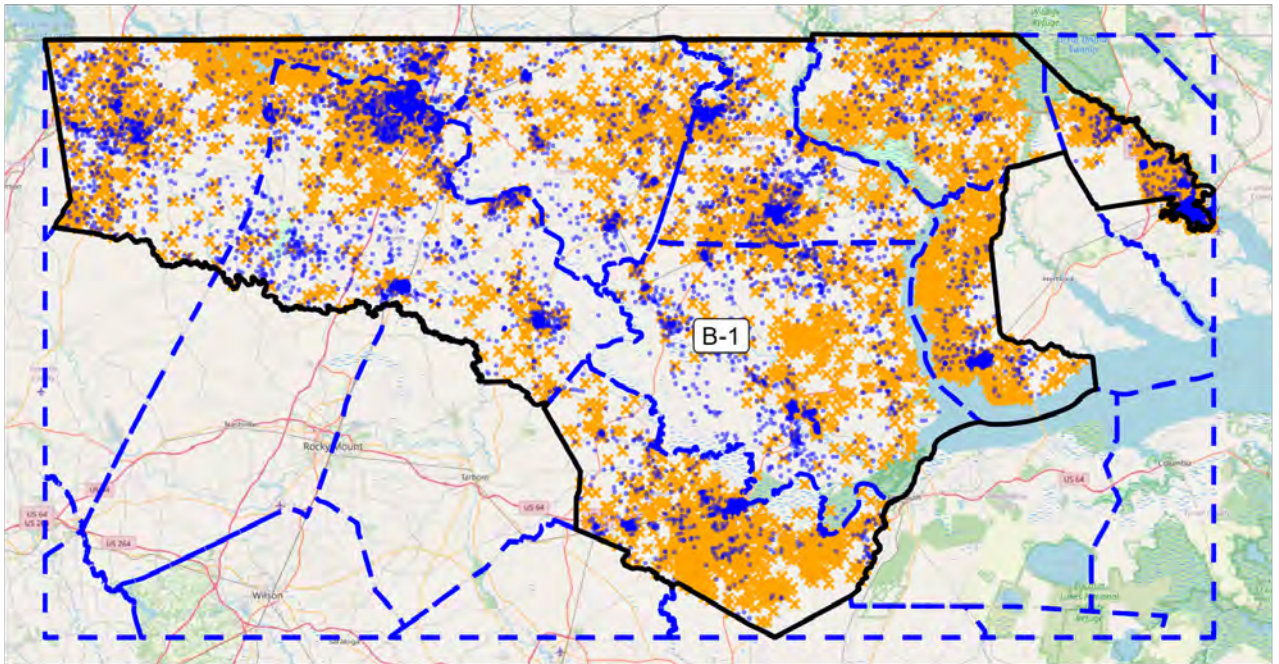


Figure 9: Proposed VRA District in Demonstration Map B, Dot Density Map



4 Conclusion

I declare under penalty of perjury under the laws of the State of Ohio that the foregoing is true and correct to the best of my knowledge and belief.

Executed on 22 December, 2023 in Delaware, Ohio.

Sean Trende

Exhibit 1

SEAN P. TRENDE
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Delaware, OH 43015
strende@realclearpolitics.com

EDUCATION

Ph.D., The Ohio State University, Political Science, 2023. Dissertation titled *Application of Spatial Analysis to Contemporary Problems in Political Science*, September 2023.

M.A.S. (Master of Applied Statistics), The Ohio State University, 2019.

J.D., Duke University School of Law, *cum laude*, 2001; Duke Law Journal, Research Editor.

M.A., Duke University, *cum laude*, Political Science, 2001. Thesis titled *The Making of an Ideological Court: Application of Non-parametric Scaling Techniques to Explain Supreme Court Voting Patterns from 1900-1941*, June 2001.

B.A., Yale University, with distinction, History and Political Science, 1995.

PROFESSIONAL EXPERIENCE

Law Clerk, Hon. Deanell R. Tacha, U.S. Court of Appeals for the Tenth Circuit, 2001-02.

Associate, Kirkland & Ellis, LLP, Washington, DC, 2002-05.

Associate, Hunton & Williams, LLP, Richmond, Virginia, 2005-09.

Associate, David, Kamp & Frank, P.C., Newport News, Virginia, 2009-10.

Senior Elections Analyst, RealClearPolitics, 2010-present.

Columnist, Center for Politics Crystal Ball, 2014-17.

Visiting Scholar, American Enterprise Institute, 2018-present.

BOOKS AND BOOK CHAPTERS

Larry J. Sabato, ed., *The Red Ripple*, Ch. 15 (2023).

Larry J. Sabato, ed., *A Return to Normalcy?: The 2020 Election that (Almost) Broke America* Ch. 13 (2021).

Larry J. Sabato, ed., *The Blue Wave*, Ch. 14 (2019).

Larry J. Sabato, ed., *Trumped: The 2016 Election that Broke all the Rules* (2017).

Larry J. Sabato, ed., *The Surge: 2014's Big GOP Win and What It Means for the Next Presidential Election*, Ch. 12 (2015).

Larry J. Sabato, ed., *Barack Obama and the New America*, Ch. 12 (2013).

Barone, Kraushaar, McCutcheon & Trende, *The Almanac of American Politics* 2014 (2013).

The Lost Majority: Why the Future of Government is up for Grabs – And Who Will Take It (2012).

PREVIOUS EXPERT TESTIMONY AND/OR DEPOSITIONS

Dickson v. Rucho, No. 11-CVS-16896 (N.C. Super. Ct., Wake County) (racial gerrymandering).

Covington v. North Carolina, No. 1:15-CV-00399 (M.D.N.C.) (racial gerrymandering).

NAACP v. McCrory, No. 1:13CV658 (M.D.N.C.) (early voting).

NAACP v. Husted, No. 2:14-cv-404 (S.D. Ohio) (early voting).

Ohio Democratic Party v. Husted, Case 15-cv-01802 (S.D. Ohio) (early voting).

Lee v. Virginia Bd. of Elections, No. 3:15-cv-357 (E.D. Va.) (early voting).

Feldman v. Arizona, No. CV-16-1065-PHX-DLR (D. Ariz.) (absentee voting).

A. Philip Randolph Institute v. Smith, No. 1:18-cv-00357-TSB (S.D. Ohio) (political gerrymandering).

Whitford v. Nichol, No. 15-cv-421-bbc (W.D. Wisc.) (political gerrymandering).

Common Cause v. Rucho, No. 1:16-CV-1026-WO-JEP (M.D.N.C.) (political gerrymandering).

Mecinas v. Hobbs, No. CV-19-05547-PHX-DJH (D. Ariz.) (ballot order effect).

Fair Fight Action v. Raffensperger, No. 1:18-cv-05391-SCJ (N.D. Ga.) (statistical analysis).

Pascua Yaqui Tribe v. Rodriguez, No. 4:20-CV-00432-TUC-JAS (D. Ariz.) (early voting).

Ohio Organizing Collaborative, et al v. Ohio Redistricting Commission, et al, No. 2021-1210 (Ohio) (political gerrymandering).

NCLCV v. Hall, No. 21-CVS-15426 (N.C. Sup. Ct.) (political gerrymandering).

Szeliga v. Lamone, Case No. C-02-CV-21-001816 (Md. Cir. Ct.) (political gerrymandering).

Montana Democratic Party v. Jacobsen, DV-56-2021-451 (Mont. Dist. Ct.) (early voting; ballot collection).

Carter v. Chapman, No. 464 M.D. 2021 (Pa.) (map drawing; amicus).

NAACP v. McMaster, No. 3:21-cv-03302 (D.S.C.) (racial gerrymandering).

Graham v. Adams, No. 22-CI-00047 (Ky. Cir. Ct.) (political gerrymandering).

Harkenrider v. Hochul, No. E2022-0116CV (N.Y. Sup. Ct.) (political gerrymandering).

LULAC v. Abbott, Case No. 3:21-cv-00259 (W.D. Tex.) (racial/political gerrymandering/VRA).

Moore et al., v. Lee, et al., (Tenn. 20th Dist.) (state constitutional compliance).

Agee et al. v. Benson, et al., (W.D. Mich.) (racial gerrymandering/VRA).

Faatz, et al. v. Ashcroft, et al., (Cir. Ct. Mo.) (state constitutional compliance).

Coca, et al. v. City of Dodge City, et al., Case No. 6:22-cv-01274-EFM-RES (D. Kan.) (VRA).

Milligan v. Allen, Case No. 2:21-cv-01530-AMM (N.D. Ala.) (VRA).

Nairne v. Ardoin, NO. 22-178-SDD-SDJ (M.D. La.) (VRA).

Robinson v. Ardoin, NO. 22-211-SDD-SDJ (M.D. La.) (VRA).

Republican Party v. Oliver, No. D-506-CV-2022-00041 (N.M. Cir. Ct. (Lea County)) (political gerrymandering).

COURT APPOINTMENTS

Appointed as Voting Rights Act expert by Arizona Independent Redistricting Commission (2020)

Appointed Special Master by the Supreme Court of Virginia to redraw maps for the Virginia House of Delegates, the Senate of Virginia, and for Virginia's delegation to the United States Congress for the 2022 election cycle.

Appointed redistricting expert by the Supreme Court of Belize in *Smith v. Perrera*, No. 55 of 2019 (one-person-one-vote).

INTERNATIONAL PRESENTATIONS AND EXPERIENCE

Panel Discussion, European External Action Service, Brussels, Belgium, Likely Outcomes of 2012 American Elections.

Selected by U.S. Embassies in Sweden, Spain, and Italy to discuss 2016 and 2018 elections to think tanks and universities in area (declined Italy due to teaching responsibilities).

Selected by EEAS to discuss 2018 elections in private session with European Ambassadors.

TEACHING

American Democracy and Mass Media, Ohio Wesleyan University, Spring 2018.

Introduction to American Politics, The Ohio State University, Autumns 2018, 2019, 2020, Spring 2018.

Political Participation and Voting Behavior, Springs 2020, 2021, 2022, 2023.

Survey Methodology, Fall 2022, Spring 2024.

PUBLICATIONS

James G. Gimpel, Andrew Reeves, & Sean Trende, "Reconsidering Bellwether Locations in U.S. Presidential Elections," *Pres. Stud. Q.* (2022) (forthcoming, available online at <http://doi.org/10.1111/psq.12793>).

REAL CLEAR POLITICS COLUMNS

Full archives available at http://www.realclearpolitics.com/authors/sean_trende/